

## **Supplemental material for StylePart: Image-based Shape Part Manipulation**

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### **1. Part replacement results**

We show more part replacement results of chair (Figure 1), car (Figure 2), cup (Figure 3), and guitar (Figure 4).

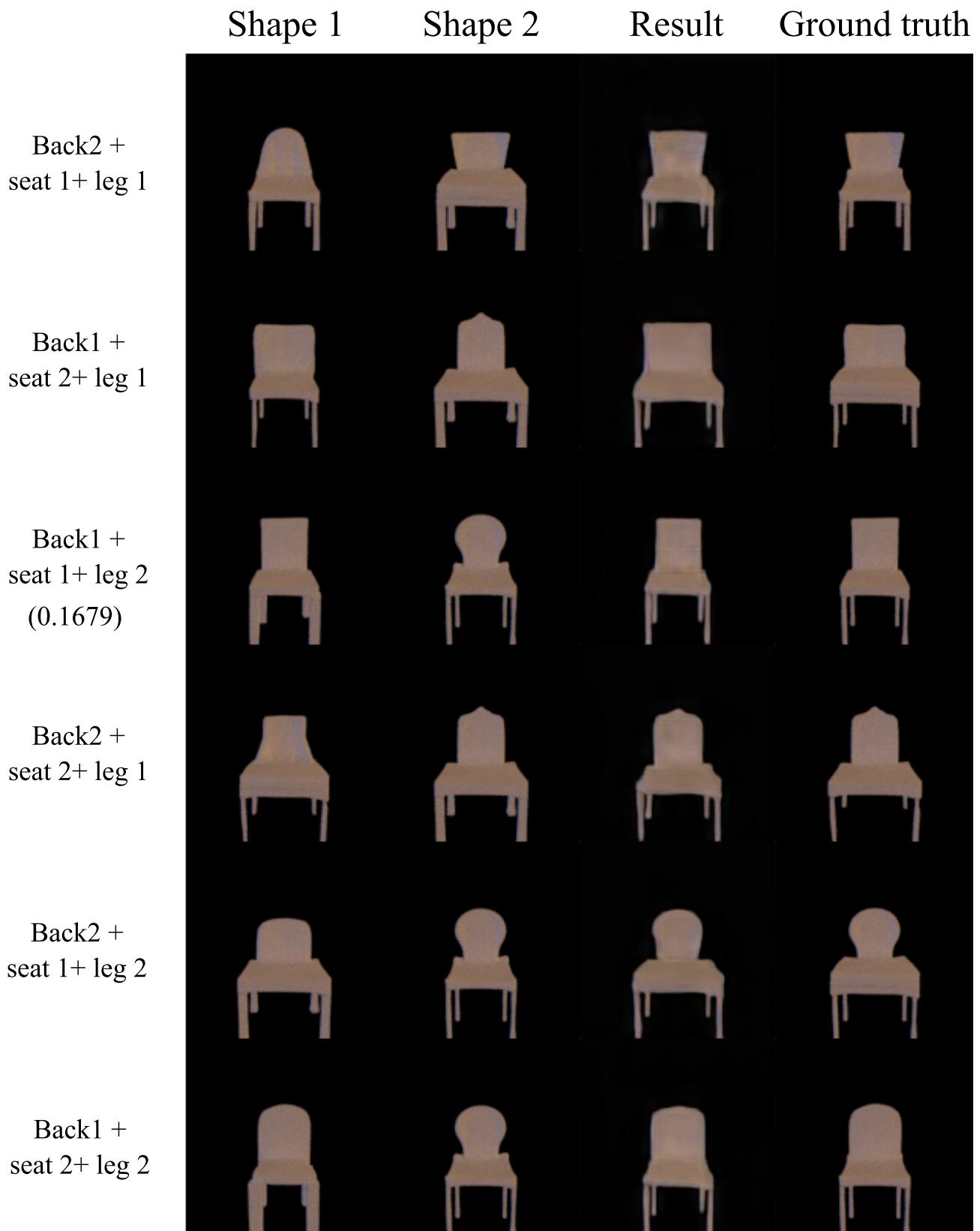


Figure 1. The results of part replacing in chair category. The result images are produced from the shape attributes composed of shape 1 and shape 2.

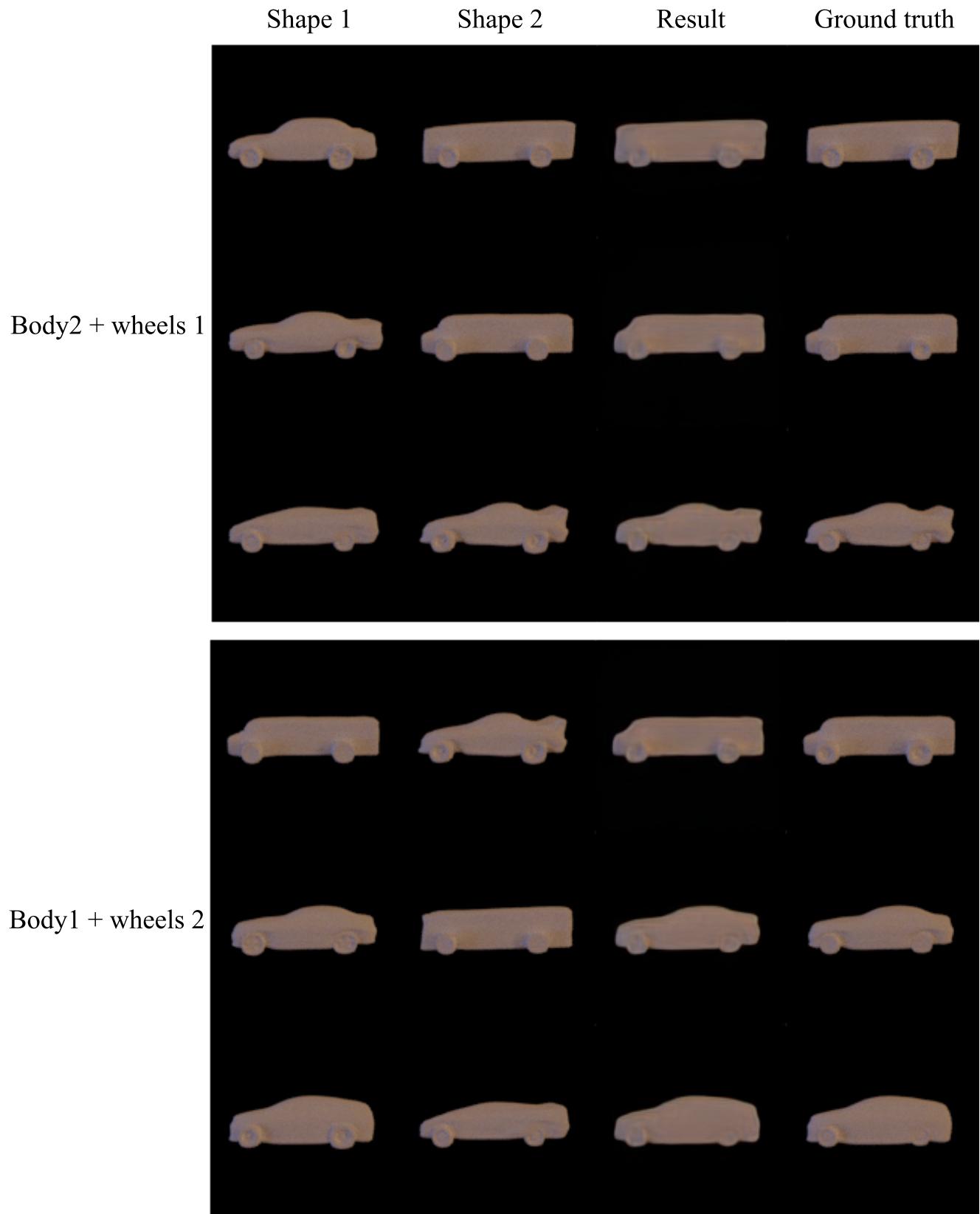


Figure 2. The results of part replacing in car category. The result images are produced from the shape attributes composed of shape 1 and shape 2.

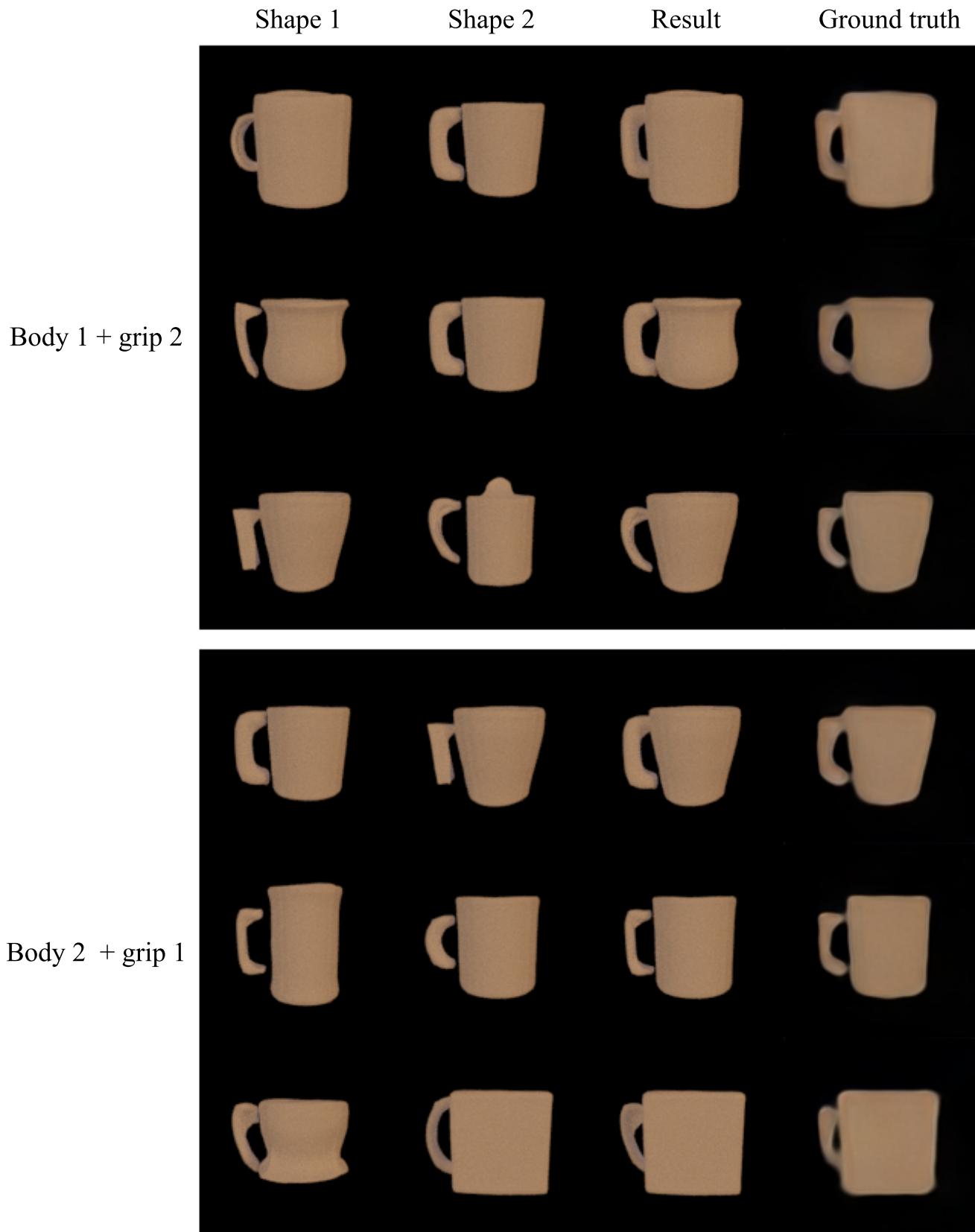


Figure 3. The results of part replacing in cup category. The result images are produced from the shape attributes composed of shape 1 and shape 2.

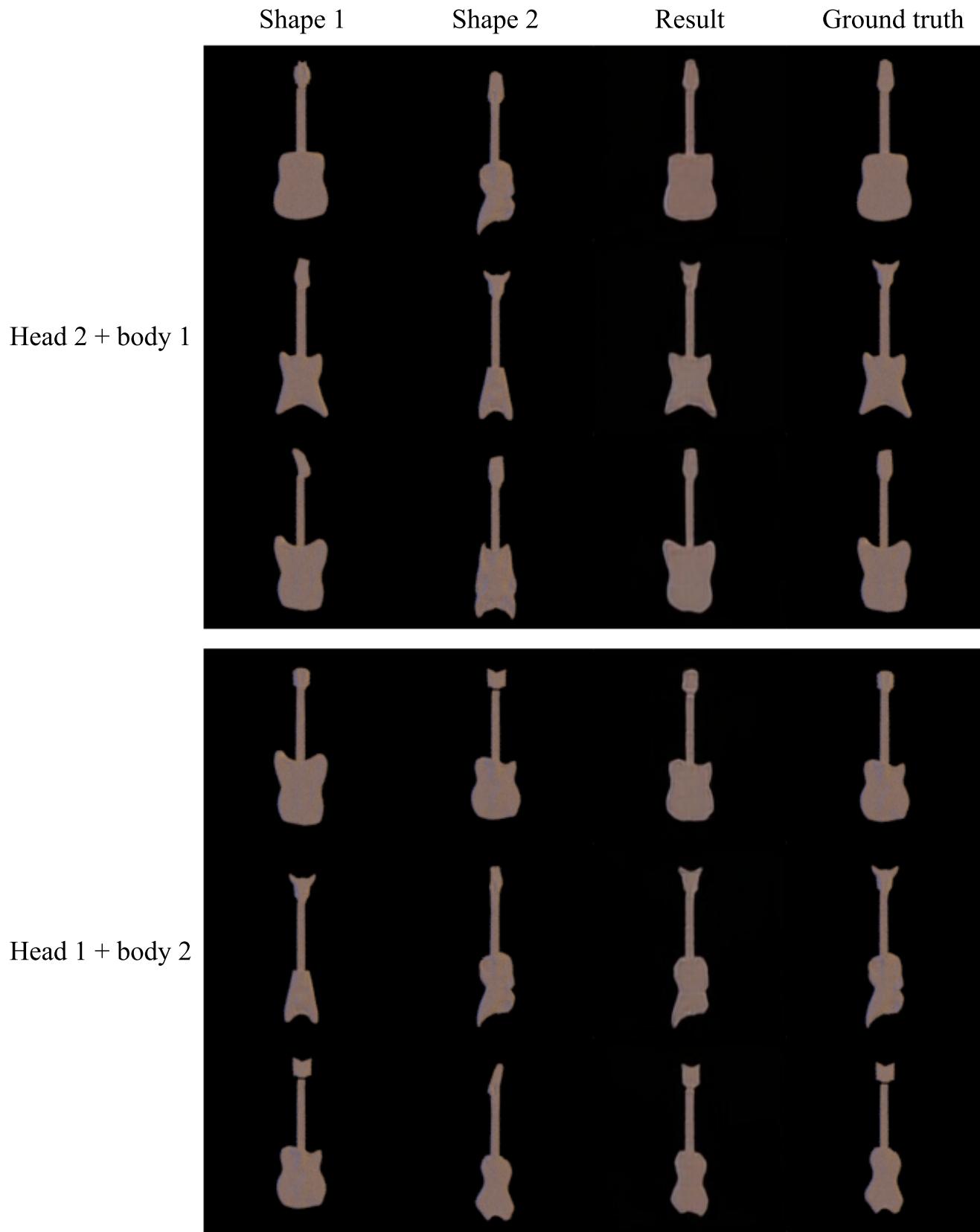


Figure 4. The results of part replacing in guitar category. The result images are produced from the shape attributes composed of shape 1 and shape 2.

## 2. Part resizing results

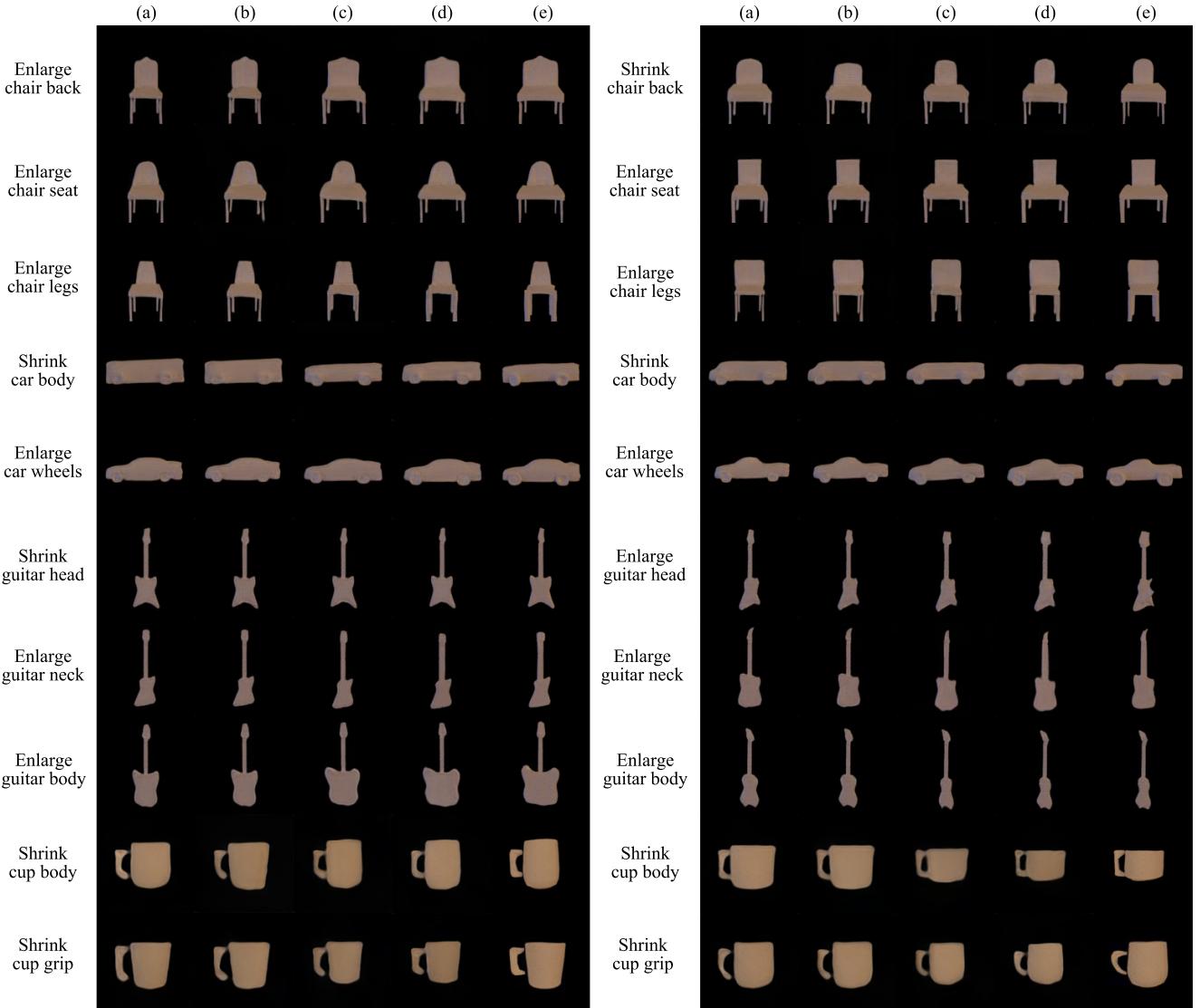


Figure 5. The results of part resizing in different categories. (a) is the source image, (b) is the result from mapping the  $P + r^P$  directly, (c) is the GAN space trajectory finetuner result, (d) is the inverted result of ground truth, and (e) is the rendered ground truth.

**Using multiple finetuner on the same image** Further more, we show that we can apply multiple latent trajectory finetuners on a single source image.

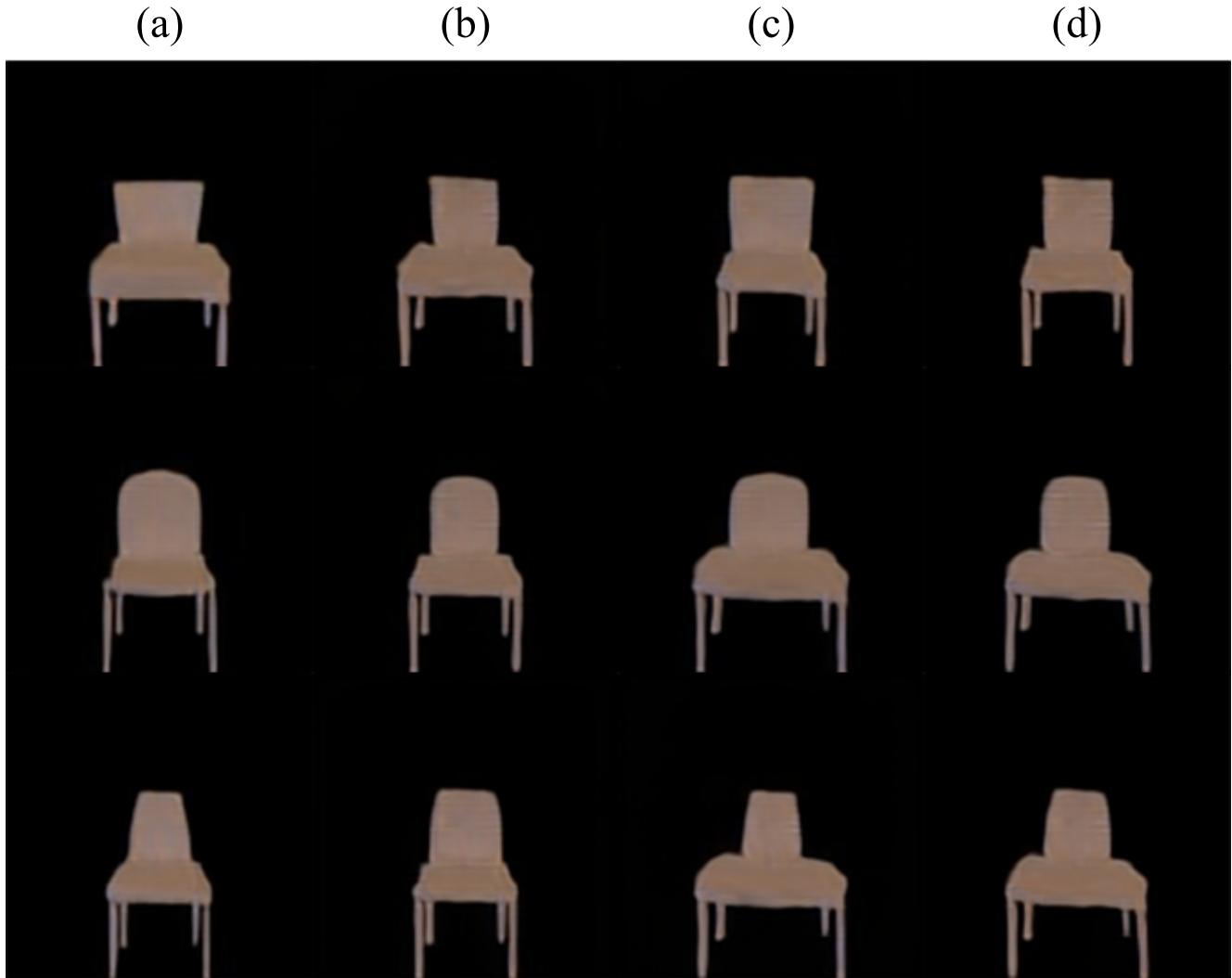


Figure 6. The results of part resizing with multiple GAN latent trajectory finetuners. (a) is the source image, (b) is the result of back finetuner, (c) is the seat finetuner result, (d) is the result of both finetuners.

### 3. Viewing angle manipulation results

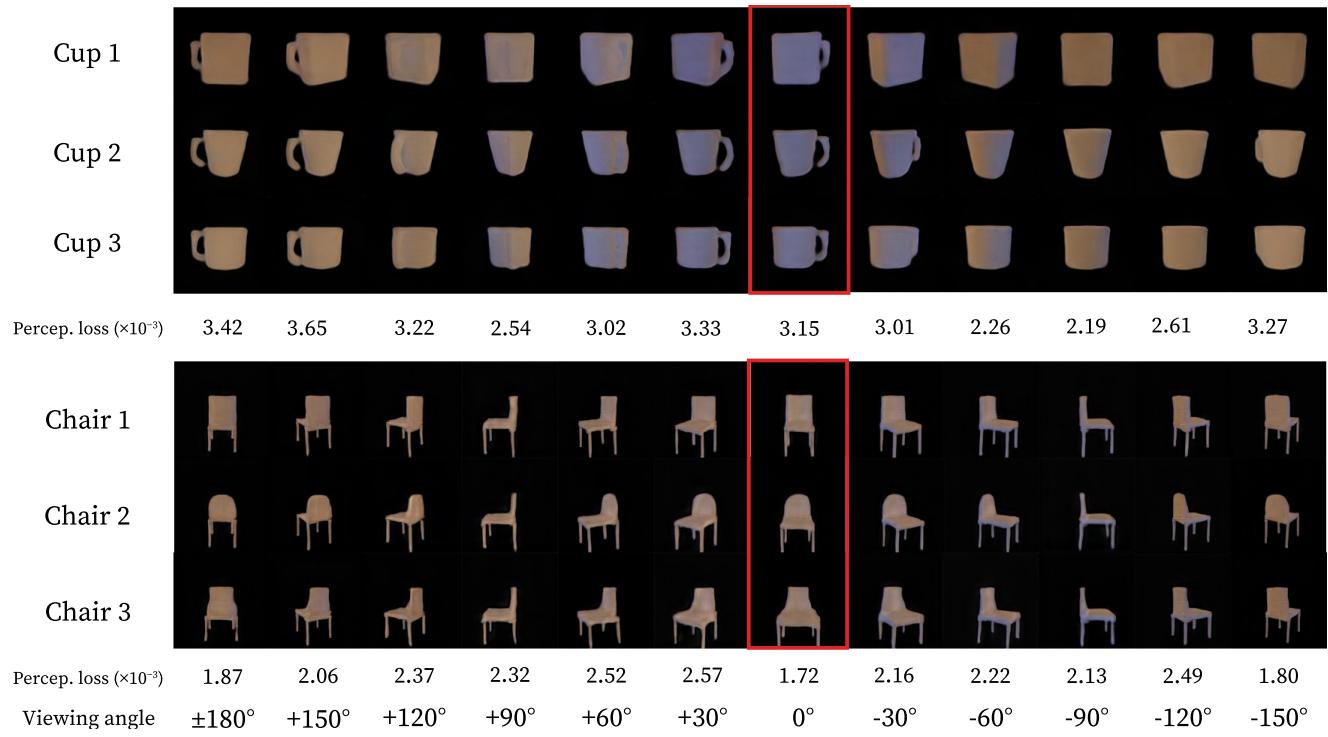


Figure 7. The results of viewing angle manipulation in chair and cup categories.

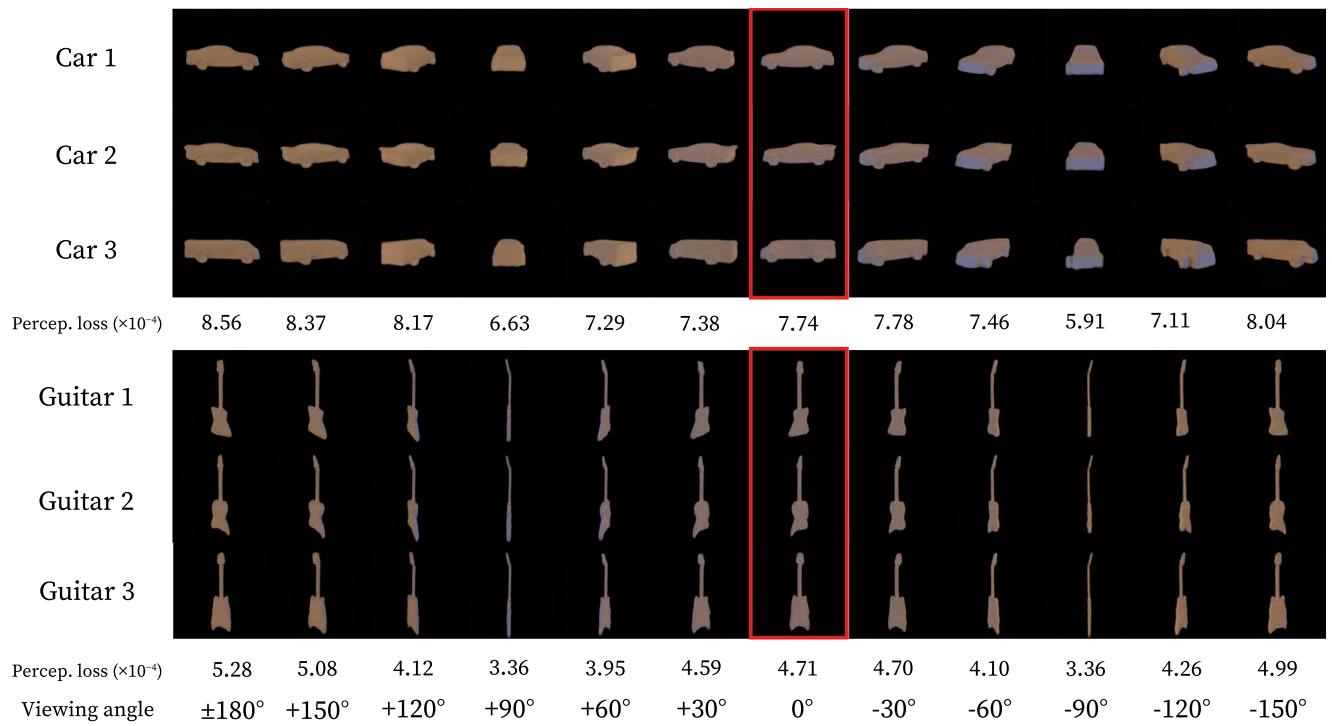


Figure 8. The results of viewing angle manipulation in car and guitar categories.